

THURSDAY, AUGUST 8, 1912.

RECENT MEDICAL BOOKS.

- (1) *Recent Methods in the Diagnosis and Treatment of Syphilis.* The Wassermann Serum Reaction and Ehrlich's Salvarsan. By Dr. Carl H. Browning and Ivy Mackenzie. In collaboration with J. Cruickshank, C. G. A. Chislett, W. Gilmour, and H. Morton. With an introduction by Prof. R. Muir, F.R.S. Pp. xxvi+303. (London: Constable and Co., Ltd., 1911.) Price 8s. 6d. net.
- (2) *Scientific Features of Modern Medicine.* By Prof. Frederic S. Lee. (Columbia University Lectures.) Pp. vii+183. (New York: The Columbia University Press; London: Henry Frowde, 1911.) Price 6s. 6d. net (1.50 dollars).
- (3) *On the Physiology of the Semi-circular Canals and their Relation to Sea-Sickness.* By Dr. Joseph Byrne. Pp. ix+569. (New York: J. T. Dougherty; London: H. K. Lewis, 1912.) Price 12s. 6d. net.
- (4) *The Prevention and Treatment of Disease in the Tropics.* A Handbook for Officials and Travellers, compiled chiefly for the use of Officials in the Sudan. By Edward S. Crispin. Pp. 95. (London: Charles Griffin and Co., Ltd., 1912.) Price 1s. net.
- (5) *The Doctor and the People.* By H. de Carle Woodcock. Pp. xii+312. (London: Methuen and Co., Ltd., 1912.) Price 6s. net.
- (6) *The Nervous System.* An Elementary Handbook of the Anatomy and Physiology of the Nervous System. For the use of Students of Psychology and Neurology. By Dr. J. D. Lickley. Pp. xii+130. (London: Longmans, Green and Co., 1912.) Price 6s. net.

(1) **O**F all modern work in pathology, none has received more public attention than the work of the last seven years on syphilis; and this not only from the universal evil of the disease, but from the profound significance of the discovery of its actual cause, the *Spirochaeta pallida*. By this discovery, it was brought into line with other infective diseases—malaria, yellow fever, sleeping sickness. New methods of study, new tests for diagnosis, new lines of treatment, came into use. The mere literature on the subject, from 1905 to 1912, would take years to read. Among a legion of novelties, two are especially notable: the Wassermann serum reaction and Ehrlich's salvarsan. The logic of the Wassermann test is one of the most complex of all the reasoning processes in bacteriology; but it hangs on to that simpler test, Widal's reaction, which is familiar to all doctors; and, in spite of the profundity of its logic,

it is practicable over a very wide and important field of work. The results of treatment with salvarsan, though it is not a drug to be played with, nor free from all possibility of risk, are amazing. None of us can doubt that, in salvarsan, we have a drug which acts directly on syphilis, as quinine acts directly on malaria.

Dr. Browning and Dr. Ivy Mackenzie give us a complete, authoritative, and wise exposition of this great subject. They weigh carefully all the questions and half-certainties which have come of the wide use of the Wassermann test, and estimate with admirable judgment the bearings of this test on our knowledge of certain diseases of the central nervous system. Part i., 150 pages, is occupied with this exhaustive study of the Wassermann test; and part ii., of equal length, is occupied with a no less thorough and valuable study of salvarsan. Nothing is left out, nor slurred over. The whole book is a monument of patient, elaborate investigation; and, though it is very closely written and closely argued, yet it is so well arranged that the essential facts stand out in clear light. We congratulate the writers, and their collaborators, on the completion of a piece of really first-hand and first-rate work.

(2) Dr. Frederic Lee, Professor of Physiology in the Columbia University, is already known over here as an excellent writer and teacher. His present book contains his Jesup Memorial Lectures, given last year in New York. They are written in a very pleasant style, quiet and thoughtful; and they are concerned with the principal factors of modern medicine, and with the spirit which has guided the advance of the last half-century. Dr. Lee has been entirely successful in his "endeavour to present the subject-matter clear-cut and in language that is not too technical for the intelligent layman"; and it would be hard to find a better book, for general reading, on the present methods, objects, results, and prospects of the medical sciences. Of course, the field is too vast to be covered by a course of lectures; but Dr. Lee has selected his instances carefully, and has arranged them in good order. One of the best lectures is that on "The Rôle of Experiment in Medicine." But the whole book is good.

(3) With Dr. Byrne's book on the semicircular canals, we come back to one of the deepest of all physiological studies, the mystery of the instinctive habit of equilibration. Dr. Byrne writes with almost excessive care to omit nothing. Pages 1 to 124 are given to general anatomical and physiological considerations; this part of the book is written with the utmost concentration of facts: it is admirably complete, but very hard reading, and rather too long. Pages 125 to 336

are occupied with the anatomy and physiology of the semicircular canals—those amazing, delicate, extended tubules of the internal ear, which, being themselves in different planes, somehow ensure our adjustment to the different planes of our surroundings. The third part of the book, pages 339 to 525, is concerned with sea-sickness, which Dr. Byrne has studied for many years, with consummate patience, in himself. He rightly points out that the final arbiter, in sea-sickness, is neither stomach, nor semicircular canals nor other outlying kingdoms of the body, but the brain itself, the Capitol of life. Every page of his book is full of learning, and crowded with condensed facts: it is a splendid example of laborious thoroughness. Such work seems to leave not a word more to be said on the subject.

(4) It is a strange contrast between Dr. Byrne's close-packed, exhaustive monograph and Mr. Crispin's short manual. Mr. Crispin writes for "those who are stationed or travelling in out-of-the-way parts of the world, away from medical advice." His book is very short, very laconic; the rules which he gives are shrewd, practical, and accurate, so far as they go, but the book is too short. Still, it is a good little book, and he writes of what he knows through and through; for he is Assistant-Director of the Sudan Medical Department. The book gives many useful hints for the safe-guarding of a man's health when he is hopelessly out of reach of medical or surgical help.

(5) Dr. Woodcock's book offers another contrast. It is a series of essays on the doctor's life and work, his duty to his patients, his duty to the public, his duty to his own profession. It is written very pleasantly, with innumerable good instances, vivid experiences, and kindly words of praise for the famous doctors and surgeons of to-day. Perhaps the best chapters are those on contract practice, Poor Law experiences, and public health. Dr. Woodcock has seen dreadful things in the slums, and has fought them. In other happier chapters, he praises Edinburgh, his University, and Leeds, that nursing-mother of many great physicians and surgeons. It has been said that "doctors, when they write well, write very well indeed," and Dr. Woodcock can write very well indeed. He is at his best when he tells of what he has seen with his own eyes and done with his own hands.

(6) Dr. Lickley's manual on the nervous system is very clearly written and well illustrated. He is a demonstrator of anatomy at Newcastle (University of Durham), and writes for students medical and non-medical. The chapters on the minute anatomy of the brain and spinal cord must be read alongside of dissections; but there are many

passages in the book which are of great interest to the general reader, and are made easily intelligible by diagrams and pictures. There is room, in the next edition, for a diagram of the motor areas of the brain, marked in their proper places on its surface. We commend this book to all who wish to get a plain understanding of the chief facts concerning the central nervous system.

BIOLOGICAL PROBLEMS.

- (1) *Upon the Inheritance of Acquired Characters.* A Hypothesis of Heredity, Development, and Assimilation. By Eugenio Rignano. Authorised English translation by Prof. Basil C. H. Harvey. With an Appendix upon the Mnemonic Origin and Nature of the Affective or Natural Tendencies. Pp. v+413. (Chicago: Open Court Publishing Co., 1911.) Price 12s. 6d. net.
- (2) *Biological Aspects of Human Problems.* By Christian A. Herter. Pp. xvii+344. (New York: The Macmillan Co.; London: Macmillan and Co., Ltd., 1911.) Price 6s. 6d. net.

(1) **T**HIS book, by the talented editor of *Scientia*, appeared in French in 1906, and later in German and Italian. We welcome it in its excellent English translation by Dr. Basil Harvey. Approaching the problem of inheritance from the side of physics and engineering, Rignano confesses that he was at first attracted to Weismann's position that there is no evidence of the transmission of somatic modifications. He felt, however, that the fundamental biogenetic law of ontogeny recapitulating phylogeny was difficult to reconcile with non-transmission. Reflecting on this difficulty, he was led to a new biogenetic hypothesis, which suggests a mechanism whereby the inheritance of acquired characters may be effected. Whatever one may think of the special hypothesis which the book expounds, there can be no two opinions as to the author's fair-mindedness, scholarship, and ingenuity.

According to Weismann's view, a reproductive portion of the germ-plasm is segregated in early development from the portion that forms the soma, and remains apart without sharing in body-making. According to Rignano's "centroepigenetic hypothesis," "the germinal substance, although limited to a single zone, and separated and differentiated from the rest of the soma, nevertheless exercises its epigenetic, formative action upon all the rest of the organism and during the whole of development, without undergoing any alteration whatever through this participation in development." We do not understand why the somatogenic part of the germ-plasm, which has the developing of the body as its business, should require any assistance from the primordium of the